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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,752	11/07/2001	Michael P. Iverson	1082-011	7854

7590 02/14/2006  
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EXAMINER

PHAN, THAI Q

ART UNIT PAPER NUMBER

2128

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/005,752	Applicant(s) IVERSON ET AL.	
	Examiner Thai Q. Phan	Art Unit 2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11/04/2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This Office Action is in response to applicant's amendment filed on 11/04/2005.

Claims 1-46 are pending in the Action.

### ***Drawings***

The drawings were received on 11/04/2005. These drawings are acceptable for examination.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-46 are rejected under 35 U.S.C. 102(e) as being anticipated by

Langemyr et al, US patent application publication no. 2004/0034514 A1.

As per claim 1, Langemyr anticipates a method and system for performing finite element analysis to resolve a joint problem with feature limitations very identical to the claimed invention. According to Langemyr, the method includes steps

Providing a plurality of finite element analysis programs for solving a physical system ([0017], [0084], for example),

Identifying a joint problem or coupling the analysis programs by using a graphic user interface (GUI) to specify the joint problem to solve the joint problem ([0195], [228]-[230], [327], [344], [410], for example),

Providing the program input values and constraint data with joint criterion to the programs for convergent analyses ([228]-[235]),

And executing analysis programs for solving the coupled or joined problem.

As per claims 2 and 3, Langemyr anticipates a step of inputting values for program executions, and providing a resolution for the jointly combined finite element analysis programs, the analysis programs executed automatically without user intervention as claimed ([344], [410], 460]-[497]).

As per claims 4-15, Langemyr anticipates the claimed invention for solving a joint physical applications such as fluid dynamics application, heat transfer program, etc.

As per claim 16, Langemyr anticipates a method and system for performing finite element analysis to resolve a joint problem with feature limitations very identical to the claimed invention. According to Langemyr, the system includes means and operating steps:

Providing a plurality of finite element analysis programs for solving a physical system ([0017], [0084], for example),

Identifying a joint problem or coupling the analysis programs specified by using a graphic user interface (GUI) to solve the joint problem ([0195], [228]-[230], [327], [344], [410], for example),

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Providing the program input values and constraint data with joint criterion to the programs for convergent analyses ([228]-[235]),

And executing analysis programs for the coupled or joined problem.

As per claim 17, Langemyr anticipates conditions and constraints for problem resolution for jointly solving a complex system using the joint application programs.

As per claims 18-29, due to the similarity of claims 18-29 to the claims 1-15 above, claims 18-29 are also rejected in like manner.

As per claims 30-46, the claims are directed to a computer readable form for use in an operating environment, wherein the computer readable form includes computer instructions and means for performing steps as in the method claims 1-15 or forming a system as in the system claims above. Claims 30-46 are also rejected in like manner.

### ***Response to Arguments***

Applicant's arguments with respect to the amended claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. US patent no. 5,671,403, issued to Shekita et al, on Sept. 1997
2. US patent no. 5,894,308, issued to Isaacs, Paul, on Apr. 1999
3. US patent no. 5,907,640, issued to Delean, Bruno, on May 1999

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4. US patent no. 5,930,494, issued to Akiyama, Yukata, on July 1999
5. US patent no. 6,377,281, issued to Rosenbluth et al, on Apr. 2002
6. US patent application publication no. 2002/0010571, issued to Daniel et al.

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Thai Phan whose telephone number is 571-272-3783. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on 571-272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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4. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Feb. 02, 2006



Thai Phan  
Patent Examiner